

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In application of:

Andrew E. Horch
Fred Hause

Serial No.: Unknown

Filed: Concurrently Herewith

Title: THYRISTOR SEMICONDUCTOR DEVICE
AND METHOD OF MANUFACTURE

§
§
§
§
§
§
§
§
§

Group Art Unit: Unknown

Examiner: Unknown

Atty Docket: 2000.006.00/US

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR §1.97 (b) (Within three months of filing national application other than a continued prosecution application under §1.53(d); or within three months of the date of entry of the national stage as set forth in §1.491 in an international application; before mailing date of first office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under §1.114);
- ☐ under 37 CFR §1.97 (c) (before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and it is accompanied by one of:
- (1) ☐ The statement specified in 37 CFR §1.97 (e_[WDF1]); or
- (2) ☐ The fee set forth in §1.17(p); or
- ☐ under 37 CFR §1.97 (d) (after the period specified in paragraph (c) of this section, provided that the information disclosure statement is filed on or before payment of the issue fee and is accompanied by:
- (1) The statement specified in 37 CFR §1.97 (e_[WDF2]); and
- (2) The fee set forth in §1.17(p).
- ☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,



FIELDS IP, P.S.
1014 Franklin Street, Suite 218
Vancouver, WA 98660

WALTER D. FIELDS
REG. NO. 37,130
360-750-9936

PATENT APPLICATION
Attorney Docket No.: 2000.006.00/US

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (Modified) (USE AS MANY SHEETS AS NECESSARY)				Complete if Known	
				Application Number	
				Filing Date June 26, 2003	
				First Named Inventor Andrew E. Horsch	
				Art Unit	
				Examiner Name	
SHEET 1 OF 3				Attorney Docket Number 2000.006.00/US	

1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code (if known)			
		US-6,350,656	02-26-02	Lin, et al.	
		US-6,346,449	02-12-02	Chang, et al	
		US-6,326,251	12-04-01	Gardner, et al	
		US-6,294,415	09-25-01	Tseng, et al	
		US-6,284,613	09-04-01	Subrahmanyam et al	
		US-6,261,935	07-17-01	See, et al	
		US-6,258,682	07-10-01	Tseng	
		US-6,242,785	06-05-01	Hossain, et al	
		US-6,187,619	02-13-01	Wu	
		US-6,124,177	09-26-00	Lin, et al	
		US-6,037,204	03-14-00	Chang, et al	
		US-6,030,863	02-29-00	Chang, et al	
		US-6,001,738	12-14-99	Lin, et al	
		US-5,989,950	11-23-99	Wu	
		US-5,982,017	11-9-99	Wu, et al	
		US-5,902,125	05-11-99	Wu	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		Country Code3-Number4 - Kind Code 5 (if known)				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PATENT APPLICATION
Attorney Docket No.: 2000.006.00/US

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (Modified) (USE AS MANY SHEETS AS NECESSARY)				Complete if Known	
				Application Number	
				Filing Date June 26, 2003	
				First Named Inventor Andrew E. Horch	
				Art Unit	
Examiner Name					
Attorney Docket Number		2000.006.00/US			
SHEET	2	OF	3		

1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code (# known)			
		US-5,891,771	04-06-99	Wu, et al	
		US-5,807,759	09-15-98	Naem, et al	
		US-5,399,513	03-21-95	Liou, et al	
		US-5,126,279	06-30-92	Roberts	
		US-4,956,311	09-11-90	Liou, et al	
		US-4,876,213	10-24-89	Pfiester	
		US-6,462,359	10-08-02	Nemati et al.	
		US-6,229,161	05-08-01	Nemati et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		Country Code3-Number4 - Kind Code 5 (# known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PATENT APPLICATION
Attorney Docket No.: 2000.006.00/US

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (Modified) (USE AS MANY SHEETS AS NECESSARY)				Complete if Known	
				Application Number	
				Filing Date	
				First Named Inventor	
				Art Unit	
				Examiner Name	
SHEET	3	OF	3	Attorney Docket Number	
				2000.006.00/US	

1

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
		MARK RODDER and D. YEAKLEY; <i>Raised Source/Drain MOSFET with Dual Sidewall Spacers</i> ; IEEE ELECTRON DEVICE LETTERS; March 1991; pp. 89-91; VOL. 12, NO. 3; IEEE	
		HSIANG-JEN HUANG; <i>Improved Low Temperature Characteristics of P-Channel MOSFETs with Si_{1-x}Ge_x Raised Source and Drain</i> ; IEEE Transactions On Electron Devices, Vol. 48, No. 8, August 2001, pp. 1627-1632; 0018-9383(01)05680-5 2001 IEEE	
		T. OHGURO; <i>High Performance RF Characteristics of Raised Gate/Source/Drain CMOS with Co Salicide</i> ; Symposium on VLSI Technology Digest of Technical Papers; 0-7803-4700-6/98 1998 IEEE	
		YANG-KYU CHOI; <i>Nanoscale Ultrathin Body PMOSFETs With Raised Selective Germanium Source/Drain</i> ; IEEE ELECTRON DEVICE LETTERS; September 2001; Vol. 22, No. 9, pp. 447-448; 0741-3106(01)07740-0 2001 IEEE	
		N. LINDERT; <i>Quasi-Planar FinFETs with Selectively Grown Germanium Raised Source/Drain</i> ; 2001 IEEE International SOI Conference; 10/01; pp. 111-112; 0-7803-6739-1/01 2001 IEEE	
		K. DE MEYER; <i>Raised Source/Drains with Disposable Spacers for Sub 100 nm CMOS Technologies</i> ; Extended Abstracts of International Workshop on Junction Technology 2001; pp. 87-90; ISBN 4-89114-019-4/020-8; 2001 Japan Society of Applied Physics	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.